DEPARTMENT OF THE NAVY
ENGINEERING FIELD ACTIVITY, NORTHEAST
NAVAL FACILITIES ENGINEERING COMMAND
10 INDUSTRIAL HIGHWAY
MAIL STOP, #82
LESTER, PA 19113-2090

IN REPLY REFER TO

5090
Code EV23/CF
November 24, 2004

Ms. Kymberlee Keckler, Remedial Project Manager
Federal Facilities Superfund Section
USEPA Region 1
1 Congress Street, Suite 1100
Boston MA, 02114-2023

Mr. Paul Kulpa, Project Manager
Office of Waste Management
Rhode Island Department Of Environmental Management
235 Promenade St.
Providence Rhode Island, 02908-5767

Dear Ms. Keckler/ Mr. Kulpa:

SUBJECT: DRAFT WORK PLAN FOR FOCUSED SITE INSPECTION, SURFACE WARFARE OFFICERS SCHOOL, STUDY AREA 20, NAVAL STATION NEWPORT, NEWPORT, RHODE ISLAND

The Navy's responses to EPA and RIDEM comments on the subject Work Plan are provided as enclosure (1) and (2), respectively. The Navy is prepared to discuss issues of concern at your convenience. Please note that the Navy considers it necessary to complete this work plan and perform the fieldwork as soon as possible; any efforts to accelerate evaluation of our responses would be greatly appreciated.

If you have any questions, please do not hesitate to contact me at (610) 595-0567 extension 142.

Sincerely,

CURTIS A. FRYE, P.E.
Remedial Project Manager
By direction of the
Commanding Officer

1566

5090
Code EV23/CF

Enclosures: 1. Navy Responses to Comments from USEPA on the Draft Work Plan for Focused Site Inspection, Surface Warfare Officers School, Study Area 20 (Comments Dated September 30, 2004)
2. Navy Responses to Comments from RIDEM on the Draft Work Plan for Focused Site Inspection, Surface Warfare Officers School, Study Area 20 (Comments Dated October 15, 2004)

copy to:
C. Mueller, NSN
S. Parker, TtNUS
J. Stump, Gannet-Fleming

R sponse to Comm nts fr m USEPA
On the Draft Work Plan for Focused Site Inspection, Surface Warfare Officers School
Comments Dated September 30, 2004

Comment 1: ***Section 2.6.2***
Page 2-14

The CERCLA decision needs to be based on concentrations of CERCLA hazardous substances. The current text does not make this clear.

Response: The text will be clarified to state that the CERCLA decision will be based on concentrations of CERCLA hazardous substances. Non-CERCLA contaminants (e.g. TPH) will be evaluated against applicable criteria for other regulatory actions.

Comment 2: ***Section 2.6.4***
Page 2-15

The last paragraph in this section states that field personnel will perform observations to determine if children trespass on site. This observation will be used to decide if a child trespasser should be evaluated during any subsequent risk assessments. Actual evidence of children trespassers is not a prerequisite for determining if this receptor should be evaluated. A child trespasser is most certainly considered a "sensitive subpopulation" and evaluation of this pathway may be necessary in a quantitative risk assessment.

Response: Discussion of whether children are observed trespassing on the site will be eliminated. A general statement regarding observation of use of the site will remain, however. Incorporation of children in a risk assessment can be later determined should the need arise.

Comment 3: ***Section 2.6.5***
Page 2-16

The second decision rule is not a clear statement that defines the requirements of the investigation based on the possible outcomes of the study. Moreover, it appears to run afoul of CERCLA procedures. Please include references of the subsequent independent actions that may be pursued should the data assessment indicate that contaminants are present above regulatory criteria as a result of some other release.

Response: The bullet will be revised to clarify that non-OFFTA related releases will be addressed on a separate regulatory track from the OFFTA removal actions.

Comment 4: ***Section 3, Table 3-3***
Page 3-10

The extraction method for TCL VOCs should be corrected to SW 846.

Response: The Navy concurs and the TCL VOC method for soil will be corrected to SW846.

Enclosure (1)

Comment 5: ***Section 4.0***
Page 4-1

The Project Action Limits proposed in the tables of Section 4 do not consider the effects of additivity for screening multiple chemicals. Non-carcinogenic EPA Region IX Preliminary Remediation Goals (PRGs) should be adjusted to reflect a hazard quotient of 0.1. This adjustment will take into account the potential effects of additivity of non-carcinogenic toxic effects of the multiple chemicals. Please refer to the comments on the tables to address this issue.

Response: Project Action Limit values listed on the Section 4 tables will be adjusted according to the comment above.

Comment 6: ***Section 4.1.1***
Page 4-2

Please include the objectives for accuracy and precision when these criteria are not specified in the analytical methods. Also clarify the statement: "In general, results that are rejected by the data review process will be disqualified from application to the intended use." Results that are rejected should never be used in the evaluation.

Response: Section 4.1.4 will be clarified to indicate that results that are rejected during the data validation process will not be used in the evaluation.

Comment 7: ***Section 4.3***
Page 4-6

The human health risk based criteria used in the screening process should be adjusted for non-carcinogenic compounds.

Response: The Navy concurs and the human health risk-based criteria used in the screening process will be adjusted for non-carcinogenic compounds as detailed in comment 5.

Comment 8: ***Section 4.3***
Page 4-7

The chemicals with detection limits that are above the project action limits should be highlighted in either this section of the document or in the Tables presented in Section 4.

Response: The Navy concurs and the chemicals with detection limits above the project action limits will be highlighted in the tables.

Comment 9: ***Section 4, Table 4-1A***
Page 4-8

The following table lists the corrected Project Action Limit for chemicals that were incorrectly presented in Table 4-1A. (Note: This table not reproduced for this response summary)

Response: Table 4-1A will be modified to include non-carcinogenic EPA Region 9 PRGs multiplied by 0.1 to take into account potential effects of additivity of non-carcinogenic toxic effects of the multiple compounds.

Enclosure (1)

Comment 10: ***Section 4, Table 4-1B***
Page 4-10

The following table lists the corrected Project Action Limit for chemicals that were incorrectly presented in Table 4-1B. (Note: This table not reproduced for this response summary)

Response: Table 4-1B will be modified to include non-carcinogenic EPA Region 9 PRGs multiplied by 0.1 to take into account potential effects of additivity of non-carcinogenic toxic effects of the multiple compounds.

Comment 11: ***Section 4, Table 4-1C***
Page 4-12

The following table lists the corrected Project Action Limit for chemicals that were incorrectly presented in Table 4-1C. (Note: This table not reproduced for this response summary)

Response: Table 4-1C will be modified to include non-carcinogenic EPA Region 9 PRGs multiplied by 0.1 to take into account potential effects of additivity of non-carcinogenic toxic effects of the multiple compounds.

Comment 12: ***Section 4, Table 4-1D***
Page 4-13

The following table lists the corrected Project Action Limit for chemicals that were incorrectly presented in Table 4-1D. (Note: This table not reproduced for this response summary)

Response: Table 4-1D will be modified to include non-carcinogenic EPA Region 9 PRGs multiplied by 0.1 to take into account potential effects of additivity of non-carcinogenic toxic effects of the multiple compounds.

Comment 13: ***Section 4, Table 4-2A***
Page 4-14

The following table lists the corrected Project Action Limit for chemicals that were incorrectly presented in Table 4-2A. (Note: This table not reproduced for this response summary)

Response: Table 4-2A will be modified to include non-carcinogenic EPA Region 9 PRGs multiplied by 0.1 to take into account potential effects of additivity of non-carcinogenic toxic effects of the multiple compounds.

Comment 14: ***Section 4, Table 4-2B***
Page 4-16

The following table lists the corrected Project Action Limit for chemicals that were incorrectly presented in Table 4-2B. (Note: This table not reproduced for this response summary)

Response: Table 4-2B will be modified to include non-carcinogenic EPA Region 9 PRGs multiplied by 0.1 to take into account potential effects of additivity of non-carcinogenic toxic effects of the multiple compounds.

Comment 15: ***Section 4, Table 4-2C***
Page 4-18

The following table lists the corrected Project Action Limit for chemicals that were incorrectly presented in Table 4-2C. (Note: This table not reproduced for this response summary)

Response: Table 4-2C will be modified to include non-carcinogenic EPA Region 9 PRGs multiplied by 0.1 to take into account potential effects of additivity of non-carcinogenic toxic effects of the multiple compounds.

Comment 16: ***Section 4, Table 4-2D***
Page 4-19

The following table lists the corrected Project Action Limit for chemicals that were incorrectly presented in Table 4-2D. (Note: This table not reproduced for this response summary)

Response: Table 4-2D will be modified to include non-carcinogenic EPA Region 9 PRGs multiplied by 0.1 to take into account potential effects of additivity of non-carcinogenic toxic effects of the multiple compounds.

Comment 17: ***Section 5.0***
Page 5-1

The SI report should present an evaluation of the presence or absence of ecological exposure pathways. Generally, a comparison to ecological screening benchmarks would be included in an SI report if there were ecological exposure pathways. It appears as if the building and pavement limit ecological exposure to a degree that a comparison to ecological screening benchmarks may not be warranted. However, a characterization of ecological exposure pathways and justification for performing an ecological screen is needed in the SI report.

Response: The Navy agrees with the observation that the new construction limits ecological exposure sufficiently to preclude an ecological screening. A discussion of this decision to not include performing an ecological screen based on the absence of ecological exposure pathways, will be added to Section 5.0.

Enclosure (1)

Response to Comments from RIDEM
On the Draft Work Plan for Focused Site Inspection, Surface Warfare Officers School
Comments Dated October 15, 2004

Comment 1: Section 2.5 Site Waste Characteristics, Page 2-11.

The report notes that a PCB transformer and lead based paint were present at the site, however based upon a site reconnaissance these should not be considered sources of contamination. As seen at other sites on the Navy base releases from transformers or lead base paint are not necessarily visually evident. Therefore, a simple visual inspection cannot be used to eliminate these potential areas of concern. Please modify the work plan accordingly.

Response: Light ballasts and lead-based paint were part of the Brig building, which has been demolished, and the debris cleared from the site. As part of this focused site inspection, soil samples collected in the vicinity of the former Brig Building as well as other potential on-site sources, will be analyzed for lead and PCBs. The transformer was reportedly located behind building 84, off-site. The approximate location of the former transformer will be added to site figures, however, an investigation of that area is not anticipated to be necessary.

Comment 2: Section 2.5 Site Waste Characteristics, Page 2-11.

The work plan states that there are no USTs at the site. It is assumed that there were also no ASTs at the site since the building was heated with steam from the bases steam plant. Please confirm this assumption.

Response: The presence/absence of ASTs at the site will be researched and included in the revised work plan.

Comment 3: Section 2.5 Site Waste Characteristics, Page 2-11.

Please provide information concerning the nature of the petroleum contamination found at the site. That is, was heavy # 6 type oil, a light gasoline product, lube oil, etc. found at the site. The report should also discuss all of the various types of oil, current as well as past, that were stored in the upgradient tanks on the island.

Response: Available information regarding the nature of petroleum found will be included. Records of fuel storage in nearby areas and the types of petroleum contamination at the site will be reviewed, and included in the revised work plan.

Comment 4: Section 2.5 Site Waste Characteristics, Page 2-11.

The report notes that a transformer was located at the site. Please depict the location of the transformer on a figure.

Response: Additional historical maps of the site will be reviewed, and the location will be added to the appropriate figures in the work plan, however, this area will not be investigated as a part of the SWOS SI.

Comment 5: Section 2.5 Site Waste Characteristics, Page 2-11.

The work plan states that samples were taken at the site during a previous investigation. The findings of this investigation were used to guide the current proposal, however, the

results of the previous investigation were not included in the work plan. Typically this information is included in a work plan. Therefore, please modify this section of the report to include appropriate information from the previous investigation. This information should included, but not be limited to, the following: tables and figures with sample results, description of sampling procedures, description of sample locations (i.e. were stained soils observed, odors detected, elevated readings obtained on field instruments, etc), discussion of sample locations (i.e. are the SWOS sample locations surface or subsurface soil locations, etc).

Response: The report documenting the petroleum findings will be included in its entirety in Appendix D of the revised work plan.

Comment 6: ***Section 3.3, Geologic Hydrologic Investigation and Environmental Sampling, Page 3-2.***

This section of the work plan discusses the proposed sample locations for the borings and wells. This section will be reviewed and comments submitted once supporting information from the previous investigation is provided.

Response: The Navy acknowledges that additional comments on the Draft Final Work Plan may be forthcoming.

Comment 7: ***Section 3.3.1, Advancement of Borings, Page 3-3.***

The work plan calls for the collection of soil borings from the site. Although not stated it is assumed that a two-inch diameter soil borings will be collected and that a core catcher will be employed during the boring effort. Please confirm.

Response: One-inch soil borings will be advanced at the site using Direct Push Technology methods for minimal site disruption and quick sample acquisition. If, during boring advancement, petroleum-saturated soils are noted either through use of a PID, or through visual or olfactory observations, and if free product is not found in the 1-inch diameter wells, then additional borings will be advanced in the appropriate areas in order to install 2-inch monitoring wells to attempt to identify the presence of free product. For 2-inch diameter wells, the size of the well screen and filter packs will be selected to provide sufficient opportunity for free product to enter the well. The text will be revised to clarify that one-inch borings will be advanced and one-inch wells will be installed unless location-specific conditions warrant the larger diameter. Please note that this approach also applies to RIDEM comments no. 11 and 13 in this response summary.

Comment 8: ***Section 3.3.2, Soil Sampling, Page 3-7.***

The work plan proposes collecting samples from the 0-1 foot interval. During construction activities it is very likely that the entire site was regraded. Further, clean fill was probably brought in to serve as a suitable subgrade for asphalt or concrete pavement, and loam was brought in for the vegetated areas. As such, collecting samples from the 0-1 foot interval might only provide information concerning the nature of the material brought onto the site and not releases associated with past operations. Accordingly, it is recommended that if surface soils are to be tested that the 0-2 foot interval be tested in lieu of the 0-1 foot, unless there is field evidence of contamination in the 0-1 foot interval. This would avoid problems associated with only testing the fill which was brought onto the site, as well as, providing information for the 0-2 foot interval which is required for the Site Remediation Regulations.

Enclosure (2)

Response: The Navy agrees that regrading and paving activities at the site have impacted the 0-1 foot interval. However, the amount and origins of materials that may have been brought onto the site are unknown. Subsequently, to accommodate CERCLA exposure scenarios, samples from unpaved areas will be collected from 0-1 foot and 1-2 feet below ground surface in addition to the samples collected just above the groundwater table. Surface soil samples will not be collected from paved areas, and samples will only be collected from just above the groundwater table. These changes will be reflected in Sections 2 and 3 of the revised work plan.

Comment 9: ***Section 3.3.2, Soil Sampling, Page 3-7.***

This section of the work plan deals with sample preservation using method EPA 5035A. The report implies that methanol or other preservatives will be used for the high-end VOC samples (freezing is not appropriate for high end samples). Please confirm that high-end samples will be preserved with methanol.

Response: High-end samples (samples with obvious petroleum contamination based on visual observation) will be preserved with methanol. The text will be modified for clarification.

Comment 10: ***Section 3.3.2, Soil Sampling, Page 3-7.***

The work plan notes that low-end samples will be frozen. In order to avoid confusion in the field the work plan should specify that the low end samples will be frozen to –20 degrees Celsius.

Response: Low end samples will be placed in vials containing reagent grade water, and will be frozen within 24 hours of sample collection in accordance with the cited method.

Comment 11: ***Section 3.3.3.1, Groundwater Monitoring Well Screen Installation, Page 3-9.***

The filter pack and the well screen for the monitoring wells must be sized for the geology of the site and allow for the free movement of contaminants (see comment below). In order to achieve this goal the work plan must specify that the well drillers will have at least two different size prepacked filter packs at the site. Alternatively, the Navy may elect to size the filter pack based upon information known to date about the sites geology and other considerations. This would require modification of the current work plan to include geologic information about the site and the appropriate calculations in support of the filter pack to be employed.

Response: Please refer to the response to comment No. 7, above.

Comment 12: ***Section 3.3.3.1, Groundwater Monitoring Well Screen Installation, Page 3-9.***

The State of Rhode Island Groundwater Monitoring Regulations contains new requirements for micro wells. Please insure that the proposed wells will meet the latest requirements.

Response: The State of Rhode Island Groundwater Monitoring Regulations will be reviewed, and the latest requirements for micro wells will be followed.

Comment 13 ***Section 3.3.3.1, Groundwater Monitoring W ll Screen Installation, Page 3-9.***

Monitoring wells at a site must allow for the free movement of contaminants into the well. The nature of the oil found at the site has not been discussed. Be advised that if heavy oils, such as number six oil are present, a course to gravel filter pack will be required in order to insure that the oil is able to enter the well.

Response: Please refer to the response to Comment 7, above.

Comment 14: ***Section 3.3.4, Well Development, Page 3-13.***

Placement of the low flow-sampling device is critical for obtaining a representative sample of the groundwater. To this end the work plan should specify that development water and/or purge water will be monitored with a FID or PID. This information along with other field observations will be used to determine where the low flow-sampling device will be placed. Please modify this section and the Groundwater Sample Collection Section to reflect this requirement.

Response: The work plan will be revised to reflect this requirement.

Comment 15: ***Section 3.3.5, Groundwater Sample Collection, Page 3-14.***

This section of the work plan states that the low flow sampling device will be placed midway in the well screen. The work plan should state that field observations, such as the presence of free product, elevated FID, PID, specific conductivity readings, odors, etc will be used to determine the placement of the low flow sampling device.

Response: The work plan will be revised to reflect the use of bladder pumps, as requested.

Comment 16: ***Section 3.3.5, Groundwater Sample Collection, Page 3-14.***

The work plan states that peristaltic pumps will be employed. Please be advised that these pumps are problematic and can artificially lower the concentrations of VOC and volatile TPH. Therefore bladder pumps must be used at the site.

Response: The work plan will be revised to reflect use of bladder pumps, as requested.

Comment 17: ***Section 3.5, Investigation Derived Waste, Page 3-18.***

The report notes that investigation derived liquid and solid waste will be drummed and disposed of at a later date. If the investigation at SWOS is conducted prior to or during the removal action at OFFTA the Navy may elect to dispose of the solid waste with the other solid waste generated at the OFFTA. In regards to the liquid waste, the Navy may elect to dispose of this waste onto the ground at the OFFTA in areas where the soil is schedule to be removed and in such manner as to allow percolation into the ground with no sheet runoff into water bodies.

Response: Comment noted. Waste disposal will be conducted as appropriate for the site.